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ORIGINAL COMMUNICATIONS.

A CASE OF ABORTION, ATTENDED BY SEVERE UTERINE HEMORRHAGE, TETANUS, AND DEATH.

BY JAMES D. McGAUGHEY, M.D.

I RECEIVED a summons, Monday night, December 13, 1875, at twelve o'clock, to attend immediately Mrs. J. R., a stout, middle-aged Irishwoman, who was said to be in a very precarious condition. I responded directly, and on reaching the house and making an examination of the patient, found she had been suffering from uterine hemorrhage for two or three days previous to my visit, which had increased to an abundant and alarming flow the last four or five hours, accompanied by severe uterine pains. The patient considered herself about two and a half months pregnant, and attributed her sickness to grief, having lost a sister a short time before, over whose coffin she felt the first flow of blood, which had steadily increased in quantity. A little while before entering her room she said she had had a very strong uterine pain, attended with much blood, followed immediately by relief. This I attributed to the passage of the fœtus, although all clothing and sanguineous matter had been so inextricably mixed up in a pail that a close examination did not reveal anything like an embryo or membranes. The general surface had an intensely exsanguineous look, and was coolish; pulse extremely weak and almost imperceptible; state of mind good; stomach quiet. Enjoined complete mental and physical quiet, horizontal position. Gave several doses of ergot. Made a vaginal examination, thinking the fœtus or membranes might be retained in the external os; found nothing but clots. Returned home after waiting an hour, as no further bleeding occurred. Was recalled hastily at four o'clock. Found bleeding had commenced again; severe syncope; indistinct vision; roaring in ears; pulse almost *nil*, and a condition of prostration quite alarming. I hastily introduced the speculum, and carefully tamponed the whole vagina, placing the first plug, which was saturated in Monsel's solution, immediately over the os. Continued the ergot with stimulants and strong liquid nourishment, small and oft-repeated doses of quinine and iron. Patient did remarkably well; bleeding ceased; pulse improved, and surface became comfortably warm by a gradual and healthy reaction. Removed the tampon in twenty-four hours; but, as there was still a strong tendency to bleed, the vagina was carefully cleaned out and a smaller tampon put in; previous treatment continued, with the addition of small doses of opium, to insure rest. Another twenty-four hours was passed quietly, and positive improvement was quite perceptible, physically and mentally; tampon removed and replaced by a smaller one, as there was still considerable oozing of blood from external os, which seemed much relaxed. The internal administration of ergot had produced good uterine contractions, and I now thought my patient free from all hemorrhagic danger; this was on Friday. Saturday I again removed the tampon, and cleared out the vagina; but, to be entirely sure no more blood could be lost, I placed one small plug against the external os, to which a string was attached, so that the patient could remove it herself the next day.

Patient doing well and feeling well, expressing a desire to get out of bed the next day, but was strictly enjoined to remain perfectly passive in bed, and to make no voluntary efforts whatever. I did not call again until Monday, and was quite astonished to find her in an alarming condition. I found she had been removed, contrary to my positive orders, out of bed on Sunday, the day being an exceedingly cold one, and had her clothes changed. She was anxious to get up as soon as possible, as her husband was beastly drunk almost all the time, and I think this was the principal reason for her disobeying my directions. Sunday night all the family went to bed, and left the patient to take care of herself; there was no fire in the bedroom, but one in an adjoining room, which got very low (I suspect went out) towards morning, the thermometer indicating at that time a temperature of *from 5° to 7° below zero*. On making inquiries of the patient, I found she had complained of *chilliness during the night*. She was restless, with a dejected countenance and an uneasy state of mind; pulse seventy-five, normal. Complained of pains shooting through the chest, with a suffocative feeling, accompanied by slight diaphragmatic spasm; stiffness and pain of jaws. Found she had attempted to remove the vaginal plug, Sunday, according to directions, but for some reason failed to succeed; it was immediately taken away by a little traction, and a vaginal examination made. Nothing unusual could be detected, and there was no smell at all, except a slight lochial flavor. I told the family we had a case of lock-jaw on hands, and the probabilities were all in favor of death, as the patient was thoroughly anæmic from her previous hemorrhages. A strict watch was directed to be kept, and soothing and quieting treatment directed to be given.

Tuesday, the diaphragmatic spasm had greatly increased, complicated by spasmodic action of the muscles of deglutition; increased stiffness of jaws; muscles of the neck rigid; inability to bend the head forward; countenance intensely pale; surface cool; pulse

natural, though of course weak. As it was impossible to get the patient to swallow, all medicine and nourishment had to be given by injection. In this manner I administered ten grains of chloral, fifteen grains of bromide of potassium in half a pint of beef-tea, and a tablespoonful of brandy every two hours. Patient remained quiet most of the day, with jaws firmly locked and cervical muscles rigid; flow of urine diminished.

Called Wednesday morning; found she had passed a bad night, the suffocating spasms coming on at intervals, causing great distress. Treatment was continued, with persevering endeavors to introduce as much nourishment and stimulants into the system as possible.

Thursday, found no relaxation of spasm, and the general condition of the patient unrelieved. I gave her, myself, two injections of forty grains of chloral, thirty minutes apart, and succeeded in getting down a little bromide of potassium and stimulating nourishment by the mouth. She slept quietly for three hours, the jaws relaxing and falling open during that time, but immediately closing on waking. Directed for Thursday night as many nourishing enemata as could be conveniently given, and as much brandy and beef-tea by the mouth as the patient could swallow.

Friday morning found all the symptoms aggravated; had passed a night of intense suffering. Pulse more frequent and feeble; skin hot, pungently so; genuine tetanic spasms at intervals, with oposthotonic rigidity. The diaphragmatic spasms seemed so intense that it appeared as if death would be ushered in by apnœa; "facies tetanica" well marked; urinary secretion entirely suspended. General depression being so great, nothing but nourishment was given, along with an occasional ten-grain dose of chloral. In fact, the patient was moribund, and died before I left the house, from combined apnœa and asthenia, the tetanic spasms keeping up until almost the last breath.

Remarks.—Probably I have been a little prolix in giving the inception, course, and result of the case under consideration; but I was constrained to do so, because it was one entirely different from anything I had ever witnessed or had seen reported. Now, as to the etiology of tetanus in this case, I am at a loss to lay it to any one particular event, and must content myself with the opinion that it was evolved out of the general circumstances, including intense hemorrhage, *exposure in a feeble condition to severe cold*, mental anxiety on account of a drunken husband, and want of care. I feel pretty well satisfied that no embryonic membranes were left in utero, as at no time was there anything like a disagreeable smell. The tampons were all washed linen and cotton cloths, free entirely from any poisonous matters. The removal of the plug on Monday gave not the slightest relief to the inceptive tetanic spasms. But if I were to attribute the tetanic phenomena to any *two causes*, I should certainly say the most prominent ones were *absence of a sufficient amount of blood to protect and nourish the nervous centres*, and the *action of a low degree of cold thereon.* From the examination of what authorities I have at hand, I can find no case or cases of abortion with hemorrhages followed by tetanus reported. The chloral treatment allayed the spasm to a sufficient extent to procure intervals of ease to the patient, but had no curative effect whatever; in fact, it appeared to me the large doses rather increased the depression.

WALLINGFORD, CONN.

ERYSIPELAS--NITRATE OF LEAD AS A LOCAL AGENT.

BY JOHN FIRNAT, M.D.

AFTER having tried tincture of iodine, camphorated ether, nitrate of silver, carbolic acid with oil of turpentine, acetate of lead ointment, oxide of zinc ointment, and styptic collodion locally in erysipelas, in connection with the internal treatment, I have found nitrate of lead with glycerin to give far more satisfaction, and feel impelled to bring it through your journal before the medical profession. Out of a number of illustrative cases, I select several:

Case I.—L. V., æt. 9; facial erysipelas; was ordered the following prescription:

℞ Plumbi nitratis, gr. xvi;
Aq. lauro-cerasi, ʒss;
Glycerin. pur., ʒiiiss.

Sig.—Brush well the affected part, and one and a half inches beyond, every three hours, and give for the next twenty-four hours.

℞ Tr. ferri chlor., ʒss;
Glycerin., ʒss.

Sig.—Every two hours, sixteen drops in water.

Next day, P.M., she called again at my office and reported that the swelling had been arrested by the first application. I directed her to apply the solution every six hours for one day longer, and to continue the drops, and on the third day she went to school.

Case II.—Mrs. J. G. G., æt. 70. I had treated her with nitrate of silver locally, and tincture of iron and quinine internally, in spite of which the erysipelas spread farther, and was finally arrested by free and continuous use of tincture of iron and quinine, brandy,

eggs, and beef-tea. I painted her face with tincture of iodine, and one and a half inches beyond the swelling, and, as her pulse was over 96, and small, as well as on account of her age, I ordered the following:

℞ Tr. ferri chloridi, f℥i;
Quiniæ sulph., f℥i;
Acid. muriat. dil., f℥iii;
Syr. aurantii, f℥i;
Glycerin., f℥vi;
Spir. nitri dulc., f℥iii.

Sig.—Every two hours a teaspoonful in water, and report.

Early next morning her husband called on me, and said that the swelling was progressing and both eyes closed. When I reached her, the swelling extended below the chin, behind the ears, and above the eyebrows. I now brushed her face with the solution of nitrate of lead three times over, and one and a half inches beyond the swelling, and directed its repetition every three hours, the iron and quinine mixture every two hours, and a tablespoonful of good whisky every three hours. I heard no more from her until six or seven days afterwards, when I saw her standing in the market.

Case III.—Mrs. G. L., æt. 22; came to my office in the spring of 1875, on account of erysipelas of the face. I painted her swollen face three times with tincture of iodine, and one inch beyond the swelling, and after it dried applied styptic collodion, and prescribed the following:

℞ Calomel., ext. colocynth. comp., āā gr. x.

Sig.—For one dose, and follow by the iron and quinine mixture.

Early next morning her husband requested me to come as quickly as possible, as his wife was about dying, being scarcely able to breathe. Half an hour later I found her struggling for breath on account of œdema of the glottis. I immediately took some flannel, poured hot water on it, wrung it out and saturated it with turpentine, then applied it around the neck, and ordered it to be repeated every half-hour. At the same time I gave her pulv. Doveri, gr. viii, pulv. ipecac., gr. iii, and left a similar dose to be given an hour later. About 10 A.M., I saw her again, with Dr. George B. Walker. Her breathing was easier, and the fear of impending suffocation was gone. We agreed to give her the following: Pulv. ipecac., gr. vi, every four hours; also quinine, gr. vi, every six hours, and, if restless, to take pulv. Doveri, gr. iv, every three hours, and to continue the turpentine stupes every three hours until they could be borne no longer. At 6 P.M., the turpentine stupes as well as ipecac had had their effect; the former was discontinued, and the latter taken in four-grain doses every six hours; the quinine continued, with the addition of twenty drops of tincture of iron. Next morning her pulse was 110, and weak; she had intense headache; tongue thickly coated, and the swelling had spread all over the head; her breathing was easier. She had slept little, if any, and had no appetite. She was ordered to continue the ipecac in four-grain doses, also the quinine and iron, and to take brandy, egg-nogg, and beef-tea freely. The following was likewise directed:

℞ Olei terebinth., f℥iii;
Acid. carbol. cryst., ℥ss;
Glycerin., f℥i.

Sig.—Rub all over the head and two inches beyond the swelling every three hours.

On the third day her general condition was about the same as the day before, except that the swelling reached the middle of the neck all around. I now painted with tincture of iodine, and then brushed well with a forty-grain solution of nitrate of lead three times, and continued the other treatment. At 4 P.M. I called again, when, to my great satisfaction, I found the swelling arrested. I now left off the ipecac and the other mixture, and prescribed a tonic mixture and a sleeping draught, also compound rhubarb pills to move the bowels, and directed the continuance of the brandy and beef-tea alternated with cream, soup, and chicken-broth. Under this treatment she steadily improved, and after the tenth day I discontinued my visits, as she was fully convalescent.

I have also used the nitrate of lead, 10 to 15 grs. to ℥j glycerin, in eczema of the head, washing previously with tar-soap, and then applying it with entire success, in connection with small doses of Fowler's solution and iodide of potassium.

REPORT OF A CASE OF FIBROID GROWTH IN THE LARYNX.

BY CARL SEILER, M.D.,

Attending Physician to the German Eye, Ear, and Throat Infirmary.

IN November, 1875, Mrs. B., æt. 30, consulted me in regard to her voice, and informed me that when ten years of age she had suffered from whooping-cough, and that ever since her voice had been husky, at times being quite lost. She also stated that her voice would "give out" after ten minutes' talking or reading aloud, and that she then felt a heavy dull pain in her throat. Of late this had grown so annoying that she had come to Philadelphia to seek relief.

On making a laryngoscopic examination, I found the following conditions. The mucous membrane of the pharynx was dry and injected, with the follicles enlarged, but not suppurating. The epiglottis was somewhat swollen, and overhanging the glottis, so that it was at first difficult to obtain a view of the whole length of the vocal cords. The mucous membrane lining the larynx and trachea, as far down as I could see, was in a state of subacute inflammation, and a catarrhal ulcer was situated in the inter-arytenoid space. The vocal cords themselves were reddish and

thickened, but not very markedly so. About the middle of the left vocal cord I saw a small round prominence of a reddish hue, projecting from below into the glottis, and thus interfering with the close approximation of the cords in vocalization.

This growth I found to be firmly attached by a broad base to the lower surface of the left cord, thus giving it the character of a wart-like excrescence. I perceived at once that in this case an operation with the knife or guillotine, or even with the forceps, would not be practicable, as the projection of the growth beyond the margin of the cord was not more than about two lines. I therefore concluded to apply the solid nitrate of silver to the growth, by means of a bent silver probe dipped into the melted caustic and then cooled.

By this method the danger of dropping the piece of caustic from a holder into the trachea is entirely avoided, as the silver salt adheres firmly to the end of the probe. Another advantage, by the way, of this mode of procedure, especially in clinical practice, is that the probe can be heated to a white heat, and thus all the *materia morbi* which might adhere to it from a specific ulceration previously touched is completely destroyed.

After a few applications of the caustic, the growth lost its roundness, and its surface appeared wrinkled and shrunken. Unfortunately, at this time the patient was obliged to return home; but she said she would visit me again in the spring,—which she did.

When I saw her again, in February, the growth had returned to its former round shape, but appeared somewhat smaller; the hyperæmia of the mucous membrane was also less; while the ulcer, which had been touched before with a solution of silver, showed scarcely any change.

I resumed the treatment with caustic applications, under which the growth gradually diminished, until finally the cords met perfectly in vocalization and the voice had almost regained its normal sound. I then desisted from the use of the nitrate in a solid form, but applied instead a strong solution (120 gr. to ℥i) by means of the brush, with a view of removing the base of the tumor on the under surface of the cord. This I kept up until there was scarcely any huskiness perceptible in the voice, and the glottis and surrounding parts presented a normal appearance, the ulcer in the inter-arytenoid space having healed up previously. The patient at this time was again obliged to leave the city.

Of course, it is impossible to affirm that the growth was completely removed, as its whole extent could not be ascertained; but all the symptoms by which it made known its unwelcome presence disappeared, and, although nearly three months have elapsed, I have as yet heard no account of even their partial return from the patient.

1327 Spruce Street.

A NEW SPLINT.

BY FRANK EYRE, M.D.

THIS splint allows extension of the wrist and passive motion of the fingers in tuberculosis, in synovitis of the wrist, and in fractures of the lower third of the fore-arm. It consists essentially of a palmar splint for the fore-arm, with the addition of an extending apparatus, so arranged that the fingers are allowed to move between the two lateral attachments.

The extending force is applied to the adhesive strips fastened to the dorsal surface of the hand, the counter-extending force being applied to the adhesive strips fastened to the upper third of the fore-arm.

The extending force is produced by revolving the block underneath the bracket, which has the cord attached to it. The block can be turned every twelve hours, as the dressings become loose. The addition of the pulleys allows an easy extension.

The above splint was tried upon a patient with tuberculosis of the wrist, in the Philadelphia Hospital, gave ease, and allowed passive movements of the fingers and wrist without the removal of the dressings.

3341 Woodland Avenue.

Boring for Water.—The drive wells which are extensively used in the South and West are made as follows. A piece of one and a quarter inch gas-pipe is perforated with several hundred holes near the end, which is covered with a fine brass-wire screen, and this in turn is protected by a covering of sheet-zinc or iron, also perforated. The extremity of the pipe is sharpened, or a steel point may be fixed. It is then driven into the ground, adding pieces on the top as it sinks in.—*Druggist's Circular.*

According to Prof. Herschel, aniline blue and red, dissolved in glycerin, will give a permanent dark rosy-red stain to tissues which have undergone amyloid degeneration, healthy portions assuming at the same time a blue color.

Poisoning from Quinine.—Dr. J. J. Putnam has reported a case in which, when two or three grains of quinine were administered, swelling of the lips and tongue, with redness of the face and neck, was produced.

NOTES OF HOSPITAL PRACTICE.

PHILADELPHIA HOSPITAL.

SERVICE OF DR. F. F. MAURY.

Reported by CHAS. WINSLOW DULLES, M.D., Resident at Philadelphia Hospital.

PHAGEDÆNIC CHANCRE.

GENTLEMEN: Early in the century there was in London a place called Swan Alley, in which were gathered a number of young women, most of them belonging to Northern European races, who lived as prostitutes, chiefly with sailors. The place was crowded, ill ventilated, and filthy; the occupants were degraded in their habits, indulging in excess in venery and drinking, with bad light, bad food, and bad air. As a consequence, there broke out among them a sore which was terrible in its rapid destruction of tissue, and has ever since been known as the "Swan Alley" sore.

What you see here to-day is the same sore, now commonly recognized as phagedænic chancre. Its action is sometimes so rapid in the female as to dissect out the rectum and vagina and denude the mons veneris, scooping out the entire perineum in twenty-four hours; or, in the male, the penis may slough off close to the belly in a similarly short period. In this case you see that the sloughing has gone deep into the tissue of both nates, from the posterior commissure of the vagina to the sacrum, and extends along the left side of the labium majus for about two inches. She came into the hospital three days ago, saying the sore had begun a week before, and gone to the extent here seen in that time. The present condition is not nearly so shocking as it then was, for the sore was immediately cauterized deeply with fuming nitric acid, and now you see the eschar, which has not that sickening look the phagedæna had.

At this point let me impress upon you the difference in kind and in treatment of phagedænic and inflammatory chancres.

In the latter, the inflammation is of the highest grade, and the proper practice is not to cauterize, for this would only increase the violence of their action. Phagedæna, on the contrary, is like gangrene, and a sphacelus is formed. The proper treatment of this is to limit its action, as far as possible, by an early and a most thorough cauterization,—never with nitrate of silver, as you know, for its action is superficial, but with a powerful caustic. Some surgeons use and recommend fuming nitric acid; others, bromine; others, the acid nitrate of mercury; others, the paste of carbon and sulphuric acid; and others, a preparation of the chloride of zinc (or Canquoin's paste).

Whichever of these is used, it produces a deep eschar, whose removal may be hastened by the use of poultices. These should be medicated with some disinfectant and antiseptic material, on account of the intolerable odor in such cases; and when the eschar separates, if the process has been successful, below will be found a granulating surface, which may then be treated as an ordinary ulcer in a similar place would be, remembering, however, the special cause which has produced it.

In the present case, after the cauterization, an application was made of charpie soaked in a solution composed of lime-water, one ounce, and Calvert's solution of carbolic acid, two drops. This has some decided anæsthetic qualities, and is, besides, disinfectant and slightly stimulating. It has worked well so far, as you can see by the rosy and healthy granulating surface of the ulcer.

Internally, I know of no better treatment than the administration of the potassio-tartrate of iron, which acts well on the blood and tones up the general system. This woman was immediately ordered ten grains of this salt of iron and potash and five grains of quinine three times a day. Her urine has been drawn every six hours since her admission to the hospital, to prevent its excoriating or irritating the sore. Already she is much better, being rid of the tormenting pain she had before, having a better appetite, better sleep, and a much improved mental condition.

As to later results of the sore, I do not think we need anticipate any secondary exhibition of syphilis. In these cases there is not usually any further constitutional involvement. The disease seems to expend its virulence locally. Our patient does not present any superficial glandular enlargement in the groin; but we must not forget that while the superficial lymphatics of the pudenda empty into the inguinal glands, there is a deep set below the fascia lata into which empty the lymphatics of the anus and the deeper ones of the vagina.

On feeling after these, I find no material enlargement; so that I am disposed to give a favorable prognosis.

NOTE.—The next day the dressing was changed to small poultices, made with the following solution instead of water:

R—Acid salicylic, gr. lxxx;
Alcohol, f℥j;
Glycerin, f℥iv;
Water, f℥xj.

Improvement continued rapidly, and a week later the patient was very much better, the sore being reduced almost half.

TRANSLATIONS.

THE ALTERATIONS IN THE SPINAL MARROW WHICH OCCUR IN TETANUS (Dr. Julius Elischer: *Virchow's Archiv*, lxvi., 1876).—The patient upon whom these observations were made was a woman, aged 34 years, who was injured on the 20th of May, 1874, was attacked by tetanus, and died on the 25th of the same month.

A macroscopic examination of the cord showed that there was gray degeneration of the posterior columns in the cervical and superior dorsal regions, and that on the right side of the cervical portion the dura mater was thickened and separated, and that there was a slight amount of exudation. The vessels of the cord and base of the brain were distended with blood. By the microscope there were found,—

1. Thickening of the ependyma of the lateral ventricle, and growth and increased proliferation of nucleated cells in the subepithelial connective tissue.

2. General hyperplasia of the connective tissue in the ganglia of the cerebrum.

3. Softening of the peripheral white nerve-substance from the lumbar enlargement downwards to the filium terminale, with increase of granules in the pia mater surrounding this part.

4. Amyloid degeneration of the nerve-cells in the region of the fifth and seventh nerves.

5. Division of the ganglia-cells into two layers, one red and striated, which readily absorbed carmine, the other finely granulated, yellow, which did not absorb the coloring-matter.

6. Coagulation of the protoplasm to concentrically arranged lumps, and granular degeneration of some of the ganglion-cells of the posterior horns.

7. Growth of epithelial cells around the central canal, both in the subepithelial stratum and in the tissues of the ependyma. Presence of similar cell-bodies in the covering of the lateral ventricle, and division of cells in the corpus striatum. W. A.

THE RELATION BETWEEN THE CENTRAL AND PERIPHERAL TEMPERATURE IN FEVER.—Dr. W. Schülein (*Virchow's Archiv*, lxvi., 1876), from investigations into the relative temperatures of the skin and axilla in fever patients, concludes:

1. In healthy individuals the temperature of the skin undergoes certain fixed variations.

2. In the course of abdominal typhus, peritonitis, rheumatism, erysipelas, puerperal endometritis, miliary tuberculosis, and cheesy pneumonia, changes in the cutaneous temperature are met with which do not fully agree with those of the axilla. In typhus abdominalis, even within fifteen minutes, surprisingly wide variations are observed.

3. The relations which exist in croupous pneumonia, measles, and scarlatina are totally different. In these diseases the temperature of the skin rises pretty evenly with that of the axilla.

This difference is so marked that in a doubtful case it was possible to diagnose cheesy pneumonia from the cutaneous temperature alone. Further observations are needed, however, to establish this as a constant test.

4. During chill, a fall of the temperature of the skin coincides with an elevation of that in the axilla. W. A.

LACTATE OF SODIUM AS A SOPORIFIC.—Dr. Lothar Meyer (*Virchow's Archiv*, lxvi., 1876) has administered this drug as a substitute for morphia, both hypodermically and in an effervescing powder prepared by mixing carbonate of sodium with lactic acid.

He finds that the lactate of sodium calms the nervous system of some of his patients, while, on the other hand, it interferes with digestion. W. A.

THE PATHOLOGY OF ACUTE ENLARGEMENT OF THE SPLEEN (Dr. N. Socoloff: *Virchow's Archiv*, lxvi., 1876).—Acute enlargement of the spleen is a symptom attendant upon many diseases; but why it occurs so quickly after infection, and upon what it depends, are questions which have not as yet been answered.

In an effort to solve these questions, Dr. S. conducted a series of investigations in

Von Recklinghausen's laboratory, both into the condition of spleens taken from patients who had died from various blood-diseases, and also of the same organ in animals in whom disease had been induced by the introduction of poisonous fluids into the cavities of their bodies, whence absorption could take place. From his observation of the former class of cases, he concludes:

1. The enlargement of the spleen was not invariably accompanied by the presence of organisms in its tissues.

2. In all cases in which a positive result was obtained, the micrococci were massed in the blood-vessels and in the pulp of the organ. They were also found in the walls of the blood-vessels, in the interstices of the connective tissue, and they had also, in some cases, intimate relations with extravasations.

3. In cases in which micrococci were found, the infection was relatively recent; this at least is true of the typhoid cases, for in these, when the alterations in the intestine indicated an advanced stage of the typhoid process, no organisms could be detected, while they were met with when the intestinal changes were characteristic of an early stage of the disease.

Since micrococci were not found in all these cases, it is possible that their presence was due to chance, or that, while they are always present at first, they disappear later. To settle this, a number of experiments were made by injecting putrid fluids into the peritoneal cavities of rabbits. From these experiments he concludes that splenic enlargement is not always accompanied by the presence of micrococci, and that when they are found it is only during the first four or five days after infection.

W. A.

CHANGES IN THE SPINAL MARROW AFTER AMPUTATIONS (Dr. Alfred Genzmer: *Virchow's Archiv*, lxvi., 1876; from *Comptes-Rendus*, 1872).—Vulpian gives an account of changes which he met with, both in the spinal marrow of patients who had undergone amputation at some previous time, and in the same structure in animals upon whom section of the larger nerve-trunks had been performed. These changes consisted essentially in atrophy of the cord upon the affected side, which was particularly marked in the posterior horns and columns. This atrophy consisted in a thinning of the tubules of the nerves without any diminution in the number of ganglion-cells.

In opposition to these observations, Dickson (Trans. Path. Soc. of London, 1873) found that the ganglion-cells in the lumbar region of the spinal cord of a patient whose leg had been amputated fifteen years previously were diminished in number, and also diminution of the anterior horns. Such cells as still existed had lost their processes, had wrinkled outlines, and were filled with granular pigment. Genzmer, in May, 1875, examined the spinal cord of a man who died of typhus, who thirty years previously had undergone amputation through the right thigh on account of caries; and the results attained by him, while to some extent opposed to those of Vulpian, are not in entire accordance with those of Dickson. The want of symmetry of the two sides of the cord began with the lumbar enlargement, and rapidly reached its maximum about the upper extremity of the lower third of the portion where the gray substance exists most plentifully. The alterations on the right side consisted in a diminution of the anterior cornua, together with a marked decrease of the ganglion-cells, and the anterior roots were also thinner and less numerous than on the left side. No change in structure could be found, and G. thinks it possible that the length of time, thirty years, which had elapsed since the amputation, may serve to explain the discrepancy between his results and those attained by the two observers mentioned above. W. A.

SPINAL APOPLEXY (Dr. E. Goltdammer: *Virchow's Archiv*, lxvi., 1876).—Effusions of blood into the spinal cord when traumatic influences are excluded are of rare occurrence. About thirty cases are reported, and of these, in twenty the hemorrhage was consequent upon myelitic softening, while in the remainder all evidences of such inflammatory change are wanting. In recent times, some French writers have advanced the view that spontaneous bleeding into the cord does not occur, but that such hemorrhage is always a consequence of acute or spontaneous myelitis.

The origin, course, and pathological appearances of the following case are scarcely capable of any other interpretation than that they were due to hemorrhage not preceded by any inflammatory process. The patient, a girl 16 years old, ran down two steps, took a short walk, and returned to

her dwelling, ascending the two steps. This occurred in the morning; and as she was seated upon a chair about noon of the same day, she was suddenly seized with a sharp pain in the back, between the shoulder-blades. The pain rapidly extended into both arms and around the body. She fell from her chair, and found that she was unable to move her right leg, and after half an hour the left leg was also paralyzed. Two hours later she was admitted into the hospital and examined, when it was found that she was paraplegic, with entire anæsthesia as high as the nipples. The bladder was paralyzed, reflex motion of the lower extremities was preserved, while the arms could be freely moved and their sensibility was normal. There were no cerebral symptoms, the pulse was 80, temperature normal, and her only complaints were of inability to move the legs and of pain in the arms.

A probable diagnosis of hemorrhage into the cord just below the cervical enlargement was made, and an unfavorable prognosis given. The patient lay in the hospital from the date of the attack (April 21, 1874) until her death (April 15, 1875), consequent upon exhaustion from bed-sores. When the spinal canal was opened and the cord removed, the dura mater was found normal. The cord itself was rather paler in hue than usual, and at a point corresponding to the second dorsal nerve it bent readily, and could be felt through the pia mater to be contracted, and upon measurement its transverse diameter at this point was found to be reduced one-half. The perpendicular length of this contracted portion was four mm. When a transverse section of the cord at this point was made, it was found that the region of the gray substance of the lateral column of the right side and the contiguous portions of the anterior and posterior columns were occupied by a rusty-brown substance, which was of a dense consistency and traversed by whitish irregular striations. This rusty-brown clot took up about one-half of the transverse section, while towards the left side the corresponding regions were somewhat softer. W. A.

MULTIPLE FRACTURE OF THE LARYNX—RUPTURE OF THE TRACHEA—CURE (*Centralblatt für Chirurgie*, No. 14, 1876).—S. Treulich reports the case of a man, æt. 33, who was seized by the throat by a horse, and lifted from the ground. He was rendered unconscious for a few moments, and when he revived was unable to speak or swallow. Externally nothing could be noticed but a superficial abrasion of the neck, with emphysema of the throat and thorax. In a few hours dyspnœa became so great as to require the performance of tracheotomy, when there was discovered a wide separation between the cricoid and thyroid cartilages, with rupture of the crico-thyroid membrane. The cricoid cartilage was split in two places, leaving the middle piece isolated, and the left ala of the thyroid was also broken off. The trachea was torn across obliquely, and had sunk down so that there was an opening an inch in width between the larynx and the trachea. A canula was introduced, and the patient was carefully watched. Recovery was almost unimpeded. There was but little fever; on the third day the pulse fell to 45, probably in consequence of an irritation of the vagus, but rose again on the following day to its normal condition. During convalescence a few splinters of cartilage exfoliated. The cure was complete at the end of three and a half months. The thyroid was somewhat unsymmetrical, the mucous membrane of the larynx was reddened, the vocal cords were thickened, and the voice was a little hoarse. Respiration was easy, however, and the general health excellent. J. W. W.

PYO-PNEUMOTHORAX FROM AN ULCER OF THE ŒSOPHAGUS (*Centralblatt für Chirurgie*, No. 14, 1876).—Treulich reports the case of a man, æt. 40, who swallowed a hard piece of meat, and suffered for six successive days from pressure in the gastric region and vomiting after each meal. After the passage of an œsophageal bougie, deglutition became easier, though no obstruction was met with, and vomiting was repeated but once, when a piece of sinewy meat about two inches long was ejected. Three days later a pyo-pneumothorax of the right side was developed, which before long resulted fatally. The autopsy disclosed as the cause of the trouble an opening in the right wall of the œsophagus, about one inch in length and four lines in width, with irregular borders. It was about two inches above the cardiac opening, and led into the pleural cavity. At the upper portion of the œsophagus there was a marked diverticulum. J. W. W.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, JUNE 10, 1876.

EDITORIAL.

MEDICAL STATISTICS OF THE PROVOST-MARSHAL-GENERAL'S OFFICE.

IT is probably known to all our readers that, since the termination of the war, the work of compiling the medical statistics which had been accumulated in the Provost-Marshal-General's office has been steadily going on; and we at last have the results of this labor before us, in the shape of two large, handsome quarto volumes, entitled "Statistics, Medical and Anthropological, of the Provost-Marshal-General's Bureau, derived from Records of the Examination for Military Service in the Armies of the United States during the late War of the Rebellion, of over a Million Recruits, Drafted Men, Substitutes, and Enrolled Men. Compiled, under direction of the Secretary of War, by J. H. Baxter, A.M., M.D., Colonel and Chief Medical Purveyor United States Army, late Chief Medical Officer of the Provost-Marshal-General's Bureau."

This somewhat lengthy title is given in full, since it explains, to a considerable extent, the scope and character of the work.

The second volume is made up of tables, consolidated from the reports made by the surgeons of boards of enrollment of the results of their examinations of men for military service, including bodily measurements. The first volume is occupied with a discussion of the results furnished by these tables, with a presentation of these results in their many different aspects and connections, by means of graphic charts and maps, and by a selection from a series of reports made by the surgeons of boards of enrollment in response to a circular letter issued by Dr. Baxter, May 1, 1865, requesting information upon ten points relating to medical topography, anthropometry, and the results of their experience in general.

These last reports contain much information of interest relating to medical geography, and will be valuable documents to consult for the future historian of the war.

At the commencement of the volume we find eighty-seven pages of introductory remarks, in which is given an interesting outline of the history of anthropometry, and the various attempts which have been made to find some geometrical key or cabalistic pantacle which would apply to the proportions of the human body, and a summary of the results obtained by those who, abandoning theoretic considerations, have applied themselves to making actual measurements; and especially of the works published by the Sanitary Commission, edited by B. A. Gould, and that of Guetelet. In connection with this is a full and valuable bibliography on the subject of anthropometry.

Following this comes the discussion of the tables, which is enforced by sixty graphic charts, in which these results are presented in such a way as to catch the eye and be easily understood. Twenty-four of these show the relation of certain diseases to social condition, complexion, age, height, and nativity; ten the relations of diseases to occupation; and twenty-four the relations of disease to locality by States, which is also shown in another way by eleven tinted maps. These charts and maps present many curious and unexpected relations between bodily proportion and certain diseases, and also between localities and disease. For instance, the ratio of rejections for paralysis in Maryland is more than twice as great as in Michigan, while for insanity New Hampshire heads the list, giving a proportion three times as great as New York or Pennsylvania.

It is not the purpose of this notice to go into details with regard to this work, or to

attempt any criticism of it; it is one of those great collections of facts whose value is permanent, and in which all statisticians, anthropologists, and persons interested in state medicine will find much material for careful study and reflection.

In style of publication, paper, and press-work, it is admirable, being a specimen of the best work of the Government Printing Office, and highly creditable to all concerned.

Its distribution is in the hands of members of Congress, who will probably find that their copies will not long remain uncalled for.

MICHIGAN UNIVERSITY.

AT the May meeting of the Michigan State Medical Society, the question whether graduates of 1876 of the University of Michigan should be eligible for membership was referred to a committee of nine. The report of this committee sketches the rise of the homœopathic department of the University, without expressing any opinion as to whether the regular professors did or did not do right in acting as they did, but states that no evidence has been produced of any collusion of members of the faculty with the regents or others in favoring the passage of the homœopathic acts. In regard to the graduates of 1876, it was recommended that they be received into membership, because they had entered as students before the establishment of the homœopathic department, and because no homœopathic students were graduated in the spring of 1876. The report ended with the following series of resolutions:

Resolved, That we are not content with the existing situation of the Medical Department of the University, because in our opinion it is not calculated to maintain or advance medicine as a science, nor is it consistent with the honor or interest of the profession.

Resolved, That a State under our form of government cannot successfully teach either medicine or theology, and that the medical profession ought to be its own teacher and the guardian of its own honor.

Resolved, That we regard all legislative interference with the government of the University as unconstitutional, wrong in principle, and harmful in its results.

Resolved, That section 4 of the constitution of this State Society be amended so as to read as follows, viz.: "Section 4. The resident members should be elected by vote of a majority present at any regular meeting, their eligibility having previously been reported upon by the committee on admission; *Provided*, That no person shall be admitted to membership who practises or professes to practise in accordance with any so-called 'party' or sectarian school of medicine, or who has recently graduated from a medical school whose professors teach or assist in teaching those who propose to graduate in or practise irregular medicine."

The submission of the report was followed by an animated debate. The yeas and nays being called for, the report and the resolutions were adopted by a large majority; the fourth, being an amendment to the by-laws, was, under the rules, laid over until the next annual meeting.

Even the friends of the faculty, so far as we can learn, believe that it was only the rules which prevented the fourth resolution from being made at once imperative, and that next year, unless different counsels prevail, the graduates of the University of Michigan will be placed under a ban.

THE ALCOHOL QUESTION.

FIGURES recently published in the London *Times* appear to show that intemperance is on the increase in Great Britain and Ireland. From 1860 to 1874 the consumption of malt liquors for each head of the population increased 35 per cent., and the consumption of spirituous liquors 28 per cent. Moreover, the convictions for drunkenness have during the ten years preceding 1874 increased nearly ten times as fast as the population,—*i.e.*, 85 per cent., while the population has increased only 9 per cent.

The statistics drawn from police commitments are subject to so many sources of fallacy that it is not safe to predicate any opinion upon them. Alterations in laws and in the activity of the police authorities may entirely change the percentage of commitments without there having been a corresponding change in the habits of the community. But it is otherwise with figures drawn from the amount of alcoholic liquors used by a community; and it would seem logically certain that there has been a terrible increase in the amount of drinking in the United Kingdom. To our mind, it is no offset to this, as the *Times* writer appears to imagine, that the amount per head of food, and especially of tea, consumed has also increased. This increase in all probability is the result of the increased wages and general bettered condition of the lower classes of England; and the increased use of alcohol probably has the same source. It is a very sad but a probably true conclusion, that to a large number of the laboring population increased pay means simply increased indulgence in riot, and not increased culture, thoughtfulness, and comfort.

Temperance lecturers are apt to dwell upon the evils of alcoholism. Unfortunately, we are but too familiar with these. The question is, How shall they be remedied? Sir Hartcourt Johnson recently attempted to fix in the United Kingdom the maximum legal proportion between the number of the population and that of the public houses. Some good might reasonably be expected from such a law; but Parliament refused to pass his act.

The experience of this country seems to show that prohibition in sparsely-settled districts does a great deal of good, but that in centres of population it is almost worse than useless.

In Sweden, the government control of the drinking-places is said to have resulted in great good; so that Norway has already in many of its large cities, although not yet in Christiania, set the same plan in operation. The method is original, and must be altogether shocking to our American Temperance Society folk: the Temperance Societies become the sellers of rum!

The municipal authorities of the large towns in Sweden, and first in Gottenberg, gave the whole liquor trade into the hands of certain societies composed only of the most respectable citizens. These societies buy wholesale the best—that is to say, unadulterated—liquor, and are in every way responsible for its retail. No intoxicating liquors can be sold except by vendors whom they have chosen, and who follow regulations drawn up by the societies and pay the latter a certain sum annually for their privilege. The regulations require that no intoxicating liquors are to be sold any evening after ten o'clock, or between five o'clock Saturday evening and nine Sunday morning. Great care is also taken to have food and such unintoxicating beverages as coffee and tea placed before the customers wherever brandy is sold. All the profits accruing to the societies which have control of the liquor trade are devoted to public and charitable purposes and institutions.

LEADING ARTICLES.

THE PROPHYLAXIS OF CHOLERA.

WHILE "Preventive Medicine" has of late been making decided progress in various directions, no better work has been done in any of its departments than that which has for its ultimate object the suppression of Asiatic cholera.

One of the ablest laborers in this field is Prof. Max von Pettenkofer, of Munich, some of whose writings are already widely known. A report by him upon an epidemic of cholera occurring in the prison at Laufen—a masterpiece in its way—is noticed in another part of this journal. More recently, Prof. Von Pettenkofer has published an article upon the prophylaxis of cholera,* which contains much that is

* Zeitschrift f. Biologie, Bd. xii.: Practitioner, May, 1876.

worthy of careful consideration on the part of those who are as much interested in the prevention of disease as in its cure.

Von Pettenkofer's views are essentially as follows. In order to guard a community against the introduction of epidemic disease, three means may be suggested: 1. The attempt may be made to exclude the epidemic influence, the "disease germs," by means of a rigidly enforced quarantine. 2. The endeavor to guard the individual may be essayed by the usual precautions of personal cleanliness, attention to diet, etc. 3. The locality may be purified, disinfected, freed from sewage, polluted water may be replaced by pure, and various similar precautions may be taken.

These provisions do not, of course, exhaust all the possibilities of precaution, but they indicate the chief directions in which this may be exercised. The outbreak of cholera in a given locality may be compared to the explosion of gunpowder by a lighted match. The match or the flying spark is harmless if the gunpowder be moist, or if any one of its constituents be wanting. Now, taking this view of cholera contagion, we have the "germ" as the ignited match or spark alighting in a town on a house where the situation and water may be good, but the drainage bad. Some, only, of the constituents of the powder being present, no explosion takes place. In another locality, strict quarantine may keep *almost all* of the germs out, the drainage is for the most part fair, the water tolerably pure, but all the elements of the cholera powder being present, however diminished in amount, the explosion takes place. Cholera powder, to be sure, is a very much more complicated combination than gunpowder; but still, if we can utterly destroy *one* constituent, remove *one* link from the chain, is it not reasonable to expect that the explosive power will be lost, the concatenation of cause and effect paralyzed?

Quarantine cannot, in the nature of things, be entirely relied upon. When we consider the attenuated character of the poison, the thousand channels which can serve to introduce it, the almost indefinite period during which the "germs" may slumber, to awake suddenly to destructive life under favorable conditions, how futile an expedient must the strictest quarantine appear!

If, however, we can prepare the soil so as to render it unfavorable for the reception of cholera "germs," they may then come singly or in myriads without exciting unfavorable developments.

Purification of the drinking-water, and thorough disinfection and removal of sewage,—these two precautions can be and have been carried out perfectly, in certain cases with the happiest results. Whole towns in Germany, which were formerly ravaged by cholera during former invasions, have been entirely free from the disease during late epidemics. This result, so striking as to be incontestable, was brought about by thorough and efficient drainage, and purification of the water-supply. Certain enthusiasts hope to see the day when some procedure similar to vaccination shall be discovered, which shall do for cholera what that has done for smallpox. We may or may not live to see such a dream realized; but the real protection afforded by drainage and pure water is within reach, and it ought not to be long before the advantages of these precautions are everywhere realized.

CORRESPONDENCE.

LONDON LETTER.

[From our Special Correspondent.]

WE are very quiet in the matter of news in the medical world here, and my letter must be of a rather more practical character than its immediate predecessors. The subject of syphilis has received a considerable stimulus from the recent discussion on it, and many are finding their impressions on the subject rendered more vivid thereby than they were before, even if there has been nothing actually new added to their stock of information. As an outcome of this discussion, the matter of the treatment of syphilis has been considered. It would seem that there is already a reaction going on in the opinion of the profession as to the respective merits of mercury and iodide of potassium in the treatment of the remoter outcomes of syphilitic infection. The steady, persistent administration of mercury, especially in the form of the solution of the perchloride, is found to produce excellent effects. Neither does it follow that the persistent exhibition of mercury should cause salivation, or other unpleasant consequences of a mercurial course. But in order to secure good effects without evil consequences, or, rather, to reduce the evil consequences to the minimum, it is found that several points are to be attended to.

The first of these is to remember that the

action of the mercurial is to break down material, so that it is rendered capable of being removed by the absorbent action of the lymphatics. It is by such a process that syphilitic growths, and the stores of syphilitic material laid up in the connective tissue of the body, are removed. But the effects of the mercurial, though most acutely felt by such material, are not solely confined to them, but act upon all tissues. It is necessary, then, that instead of the plan of continued hungering with a mercurial course, an opposite system, of feeding the patient well, is to be followed. In order to obviate the destructive effects of the mercury when long continued, it is most desirable to combine with it iron in some form. The perchloride of iron goes well with the solution of the perchloride of mercury, say as ten drops of the former to thirty drops of the latter, three times every day, it being as well to give it after food, so that the two agents get thoroughly incorporated with the food. If there co-exist a cachectic condition, or the patient be worn out or anæmic, this combination renders it quite safe to push the mercurial freely, and that, too, without untoward consequences. If the nutrition be impaired, it is well to give also cod-liver oil. Such a mercurial course, so guarded and protected, may be continued for many months with the best effects. Since the adoption of this plan, the terrors of a mercurial course are greatly mitigated, in the writer's mind. For cachectic conditions, especially in middle-aged or elderly women, so common when the system is saturated with syphilis, and in children from a year or two old up to puberty, where a condition of arrested growth with distinct anæmia is so frequently found as the consequence of an inherited taint, such modified mercurial course is invaluable. It is no matter for surprise that when given alone, and freely pushed, mercury should produce baneful consequences in broken-down constitutions. But if given with the above auxiliaries, and with attentive watchfulness as to the requisites of each case, a course of mercury will often be found most beneficial, and at the same time not to be followed by unpleasant consequences. In cases of syphilitic eruptions, too, it is well to apply the mercurial locally. That is, instead of inunctions of mercurial ointment into the inside of the thigh and upper arm, it is well to rub the mercurial over the syphilitic part, and get the local advantages of the effect of the agent upon the new growths forming the eruptions. Whether mercury acts as a direct antagonist to the syphilitic poison, an antisyphilitic, as the late Dr. Headland described it, or whether merely such growths as syphilis produces are more readily broken down and brought within the action of the absorbents than normal tissues, is practically immaterial. The explanation is quite subordinate to the clinical fact.

Dr. Dickinson, so well known for his researches on changes in the kidney in renal diseases, given in his work on albuminuria, has just delivered the Croonian Lectures of the Royal College of Physicians on the same subject. They are interesting and instructive, especially as regards the chronicity of some forms of renal disease. It is too much the habit and practice of the profession to assume that when albumen and casts are found in the urine the condition is one already or immediately about to be serious. No doubt such evidences usually indicate irremediable changes going on in the kidneys; but it by no means follows that the end of the case is therefore at hand. Such evidence may be found from time to time, together with long intervals of freedom from both. Probably they mark a time when another piece of healthy kidney is being implicated and destroyed, while the intervals rather suggest periods of quiescence, when the destructive action is in abeyance. The period during which chronic interstitial nephritis is in action must often be counted, not by years, but by decades. There is a slow, subtle, but steadily progressing action going on, which at last renders life an impossibility. In spite of compensatory action in other organs, in spite of the resumption, instinctively, of the dietary of childhood, and the avoidance of all unnecessary nitrogen, the capacity of the kidneys becomes so impaired that the preservation of the organism becomes impossible. But many years elapse before so advanced a condition is reached, and during this time much may be done to retard the advance of the morbid changes. In considering what these means and measures are, it may be well to quote what Dr. Dickinson says as to the tardy progress of renal cirrhosis:

"Passing now to the more chronic disorder, that which is recognized as the granular kidney, and occasioned by creeping fibrosis, we have to describe a condition which begins with and belongs essentially to the connective and vascular structures, which are external to the proper secreting elements. The change begins in disproportional growth, somewhat of a rank luxuriance, in the fibroid tissue, with which the arterial channels are uniformly fringed. Hypertrophy of this part leads to atrophy of all the rest. Creeping along the arterial lines with slow and hesitating steps, involving the organ not all at once, but by little and little, the disease makes itself felt, not suddenly, but with so gradual a departure from health that its date is usually indeterminable, and its existence unsuspected until it has reached an advanced stage. And in other respects, too, in its progress and symptoms, it affords a precise converse to the more acute disorder. One selects the young, the other the old. One is certainly local to the gland; it is in dispute how far the other is general to the system."

Such expression of opinion, from so competent an authority, is itself very important;

expressed so eloquently and so graphically, it is doubly attractive; and those lines will print themselves distinctly and vividly on the mental retina of all thinking, reflective readers. The doctor is undoubtedly right in asserting that chronic kidney-disease is usually far advanced ere it is recognized, and that, too, by prominent members of the profession. The inference is obvious, that there is, and must be, a long period during which this insidious process is in action ere its consequences render its presence clearly manifest. The question then, practically, is this: To note the past history of those cases where such changes are detected, and to discover, if possible, what the history has been before the ailment came within the sphere of our vision, so as to form some definite ideas of the early progress, then to observe what circumstances in the history of the case seem to have especially affected the growth of the malady, for we know that great functional activity of an organ, with its contemporary and necessarily increased vascularity, is the great factor in the production of excessive growth of connective tissue. Granting that there lurks in the kidneys of some persons a much more marked tendency to the production of pathological connective tissue than is found in others, and that in such persons an inherited tendency, the gouty diathesis of Laycock, is in action, from which the others are exempt, still, it is the functional activity caused by the highly nitrogenized dietary adopted which sets up and maintains the morbid process.

The vicious views expressed in the works on food in vogue some years ago, where the value of a food was strictly determined according to the amount of nitrogen present, have led to wide-spread impressions of an erroneous and mischievous character among the people at large. If they feel themselves not so well, they fly to animal food and brown meats, thinking that in them they will find the nutritive material which will restore them to health and strength. It, of course, does not suggest itself to them that this very nitrogenized matter they consume so readily must be got rid of. And the essence, the integral part of their ailment, is their inability to eliminate successfully the effete nitrogenous matters. Instead of sweeping the flue, they pile on more fuel. No wonder, then, at the amount of chronic renal disease now seen, not in private practice only, but also amidst hospital out-patients. It is readily obvious that, in conditions of this kind, the first point to be attended to is the reduction of the albuminous elements of food to the amount absolutely required for the daily renewal of the tissues of the body. This amount has not been settled by physiologists, but it may be stated approximately that it does not consist of more than a few grains of nitrogen daily, —such amount, indeed, as is furnished by the rice diet of the Hindoo. Most people, and notably the Anglo-Saxon race, consume a great deal more animal food than is necessary for tissue-repair. That they like the eating of such food, in the first place, and that they delight in the sense of energy furnished by it, in the next place, is quite certain. But it does not therefore follow that such indulgence is harmless and free from untoward consequences. With a large number of persons the restriction of the dietary is essential to any satisfactory treatment of their passing ailments; at the same time, it is most important in checking the silent progress of those interstitial changes which Dr. Dickinson has so vividly sketched. The present wide-spread resort to mineral waters containing alkaline bases is not merely a matter of taste or of fashion; it is largely an instinctive choice; and the use of such waters materially aids in the excretion of nitrogenized waste.

The relations of excretion to the condition known as biliousness are not unworthy of note. If in urea and uric acid we find the bulk of the nitrogen of our albumenized food, it is in the bile-acids that we find the sulphur elements of this food. In the use of alkaline purgatives, we get rid at once of the nitrogen and sulphur waste, as well as of the other constituents of bile. Though fatty food will often lead to the condition known as biliousness, still there are grounds for holding that a diet rich in albumen is the necessary means for producing such states. Of course, if the spare bile be not swept away in the intestines, it goes round and round in the portal circulation, alternately given out by the bile-ducts and reabsorbed by the intestinal villi, until it is cast out by an attack of vomiting or purging, designated "a bilious attack," after which the system feels relieved; and so bilious conditions may in some persons be secured even on a limited dietary; but usually for such conditions a certain redundance of food of all kinds is essential.

Some novel operations in surgery have recently been performed by Mr. Maunder, who has cut through the thigh-bone with an iron chisel, and then corrected existing deformities. In one case, a sailor had had his thigh fractured at sea, and had lain so that the foot was turned outwards at a right angle, and consequently was quite useless to him in the rigging. Here the bone was cut through, and the foot put right. Recovery took place without one drop of pus. In two other cases a similar section of the thigh-bone was effected with most satisfactory results. In one case there was also not one drop of pus. In the other the chisel slipped, and a drop or two of pus followed, but not in sufficient quantity to retard the recovery in any way.

The spread of diseases of the nervous system is not confined to an increase of insanity, but is manifested in other forms of nerve-ailments. At a presentation to him by his old colleagues and subordinates, Dr. Crichton

Browne, the late superintendent of the famous West Riding Asylum, at Wakefield, in his reply, took occasion to point this out strongly. He said that, according to the evolution of man and the parts most exercised, so were the parts most liable to disease. There had been an age when bones and muscles were most subject to disease, but now the time had come when the nervous system was the most important matter from a pathological point of view. Nervous disease, he said, was the disease of the future, and the education of specialists in this department was of not only the greatest, but even of growing importance. It is significant to hear a man of Dr. Browne's experience speak so pointedly; but if such is the case, he has done a valuable work in the school of psychological medicine which he has founded at Wakefield, and which is already so famous. To some, it might appear that this was but the view of a specialist himself, and that, of course, each specialist is of opinion that his own department is of the first order of importance. Such, however, it is not: it is the carefully-formed opinion of a man who has possessed the most extensive opportunities for observation, together with natural capacities to observe carefully, of unusual character. Further, this expression of opinion coincides with what is written and said on these matters by other authorities. The number of men of high professional reputation in London who have devoted themselves to the study of affections of the nervous system testifies to the importance which is now attached to these forms of disease. The pace at which all have to live in the present age taxes the nervous system very heavily. It is a keen struggle to hold one's own, but it is a keener fight to force the way to the van; and the nervous system suffers in consequence. That, on the other hand, we are finding out many new agents for action on the nervous system, and that bromide of potassium and hydrate of chloral have been but recently added to our armamentarium, is equally certain. In my next letter I shall have something to say about hydrobromic acid and its usefulness.

NEW YORK, May 29, 1876.

TO THE EDITOR OF THE PHILA. MEDICAL TIMES:

DEAR SIR,—It is not often that the same conclusion is arrived at by two such different processes of study or observation as that in regard to the correct principles to be observed in the treatment of lateral curvature of the spine, which it was demonstrated at a recent meeting of the Academy of Medicine had been reached by Dr. A. B. Judson and Prof. Sayre. On a comparison of notes, they found that their ideas on the subject corresponded exactly; yet this result was arrived at entirely independent of each other, for up to the time of the meeting the former gentleman had been quite unknown to Dr. Sayre.

On this occasion, Dr. Judson read an admirable paper on the cause of the rotation invariably seen in lateral curvature (except in those rare cases due to intra-thoracic disease), in which, after referring in turn to a variety of explanations which had been offered by distinguished surgeons both in this country and in Europe, and finding them unsatisfactory, he showed, on apparently well-founded grounds, that this rotation was really due to the fact that the anterior portion of the vertebral column has very few and slight ligamentous and muscular attachments, while the posterior part is secured in the most firm manner by numerous muscles, ligaments, and aponeuroses, which ordinarily keep the spinous processes in the median line. Furthermore, he proved that when rotation takes place, the vertebræ revolve on a remote axis (to make use of a geometrical expression); so that when we find the spinous processes deflected, to however small an extent, either to one side or the other, we may be sure that the anterior portion of the bodies of the vertebræ will incline to a much greater degree to the same side, since this part moves in the arc of a circle considerably larger than the posterior. All this was beautifully demonstrated by Dr. Judson by means of an articulated set of vertebræ arranged in a wooden framework, with the spinous processes attached to the uprights on either hand by elastic cords, to represent the muscles, ligaments, etc. By pressing upon a knob at the top of the column, lateral curvature was immediately produced, the degree of rotation as well as that of curvature being in exact ratio to the amount of pressure exerted; and if the spinous processes of one of the vertebræ (near the centre of the column, for instance) was secured by inelastic cords, compensating curves, above and below this point, were immediately produced by pressure on the knob.

The practical conclusions, therefore, which Dr. Judson derived from his anatomical studies, were, that lateral curvature is analogous to Pott's disease of the spine, for the reason that in both the anterior portions of the vertebræ are primarily and principally affected; and that it would be, therefore, philosophical to treat the former on the same principle which has proved so successful in the cure or relief of the latter, viz., the removal of all pressure from the anterior portion of the spinal column, and the throwing of the weight of the superincumbent parts of the body upon the posterior portion.

Dr. Sayre expressed his unqualified satisfaction at the lucid demonstration of the subject which Dr. Judson had given, and stated, as a remarkable fact, that of late he had been treating patients with lateral curvature exactly in accordance with the views expressed by the latter, because by experience he had found the method of benefit, without understanding before precisely

why it was so efficient. He had treated several cases by means of the plaster-of-Paris jacket (applied exactly as in Pott's disease), and with excellent results, so far as can be at present determined. The first patient treated in this way was the man in whom it was necessary to make a subcutaneous section of the latissimus dorsi muscle, as described in a former letter to the *Medical Times*. Two other cases in which the latissimus dorsi was cut were also treated in the same manner; as well as several subsequent ones, in which section of the muscle was not demanded. The admirable piece of apparatus which Dr. Judson had exhibited showed conclusively that when the pressure is removed from the spinal column the latter becomes straight; and he had frequently demonstrated the same thing by suspending patients by means of straps passing under the axillæ, and thus removing the superincumbent pressure. When the spine has, therefore, been straightened out and placed in correct position, it is only necessary to apply some form of apparatus which will keep it so fixed permanently; and he had found that nothing does this so effectually as the plaster-of-Paris jacket.

Dr. Sayre then related the case of a young lady who had been wearing one of Banning's ingenious braces for lateral curvature for a long time, without any benefit whatever; while the hip and scapula had both become badly excoriated by the pressure employed. Within the last two or three days, however, this had been substituted by the plaster-of-Paris dressing, and she was already like another creature, saying that she had not felt so comfortable for years.

Of course it is yet too soon to assert positively what will be the final results in these cases; but enough seems to have been already shown to warrant us in predicting a most encouraging degree of success for this novel method of treatment in lateral curvature.

Dr. Sayre expresses himself as more than ever satisfied with the plaster-of-Paris treatment of Pott's disease, and is constantly using it, to the exclusion of all other methods, in both his private and his hospital practice. He has employed it in more than 150 cases altogether, and speaks with much more confidence on the subject now than he did at the time when he was writing his large work on Orthopædic Surgery, which has just been issued by the Appletons. This is an embodiment, for the most part, of his lectures at Bellevue College during the winter of 1874–75, and was completed when he was really just beginning to treat the disease in this way. In the second edition of the book his later experience in the matter will doubtless be fully given. If any one who is interested in the subject will stop in at Dr. Sayre's office some morning, he will receive a most cordial welcome from the doctor, and will, in all probability, have the opportunity of seeing one or more cases put up in plaster. On one occasion recently we had the pleasure of seeing the plaster bandaging applied in a case in which the disease was located unusually high up, so that the method had to be varied a little. The vertebræ affected were the second, third, and fourth dorsal, and before bandaging the thorax a compress or wide roller, about a foot in length, was placed over the spine, with a thin metallic strip on each side of the spinous processes; the whole extending up to the occiput. The plaster jacket was then put on in the ordinary way, and when the upper part of the trunk had been reached, the bandage was passed in a figure-of-eight around the forehead; after which a quantity of wet plaster was added in the cervical region and the patient laid on his face to "dry." When the process was completed, Dr. Sayre said to the latter, who, by the way, was a wondrously diminutive specimen of humanity, that could not have been more than three years of age, "Well, Eddy, how do you feel now?" "Better, thank God," replied the little fellow, in his feeble, piping voice. The relief afforded by the apparatus was evident at once; for the child, who before its application was simply able to stand by holding on to articles of furniture, could now step about the room in fine style unsupported.

At a recent meeting of the Pathological Society, Dr. Sayre reported eight cases of excision of the hip-joint in addition to those already tabulated; making sixty-one in all. The last operation was April 5 of the present year.

On the evening of May 5, Dr. F. P. Foster read a paper on "The Management of the Prolapsed Arm in Transverse Presentations," in which he advocated a method which he termed "retropulsion," as offering in many cases an excellent chance of success. It was suggested to him in the conduct of a case occurring in his own practice. On arriving at his patient's bedside, he found an arm protruding, and in carefully manipulating this, with a view to its restoration, if that were practicable, he ascertained that the head itself was easily movable by any force brought to bear upon the arm. Therefore it occurred to him to make pressure upon the latter in the direction of its long axis; and he was soon delighted to find that by this simple means he could cause the whole cephalic pole to revolve. The arm thus passed entirely up into the uterus, and presently the tuber ischii presented; so that a delivery by the breech of a living child was afterwards effected. Dr. Foster thinks this procedure has, very likely, been adopted by other obstetricians before; but, as he can find no mention of it in any of the authorities, he now offers it to his fellow-practitioners as an easy and satisfactory method of handling this often difficult and perplexing class of cases. It is certainly a question whether the manipulation could

always be so easily accomplished as it seems to have been done in Dr. Foster's case; but it is, at all events, well worth trying, as it can do no possible harm, even if it should not prove successful.

Another paper of interest at the Medical Journal Association during the month was one by Dr. F. R. Sturgis, on "Some Points in the Etiology of Hereditary Syphilis," in which he offered some further proofs on a disputed proposition upon which he had already presented several contributions to the profession, —viz., that syphilis cannot be conveyed from the father to the child without the mother's also becoming affected with the disease. He showed, however, that the burden of proof really lay on those who supported the opposite view of this question, and stated that he could not accept the alleged fact that syphilis is carried through the semen until it was satisfactorily demonstrated that the semen of a syphilitic subject is capable of inoculating a healthy individual with the disease. One of the most striking of the many cases cited by Dr. Sturgis was the following, from Langston Parker. A gentleman, who had had syphilis, married; and in the years following his wife had several children and several miscarriages. All of the children were syphilitic, yet she herself remained entirely free from any suspicion of taint. The husband, in the mean while, had undergone several prolonged courses of anti-syphilitic treatment; but without any appreciable effect on the children subsequently born. The family now coming under Parker's care, he submitted both parents to a course of mercurial vapor baths, strictly interdicting sexual congress while this was being carried out. After the treatment was completed, the wife again became pregnant, and this time gave birth to a perfectly healthy child; which seemed to show conclusively that her immunity from the disease had been rather apparent than real. In another similar instance that he mentioned, where the mother, to all outward appearances, was in perfectly good health, the latter was inoculated with active syphilitic virus. Yet she still continued entirely free from any external manifestations of the disease; which could scarcely have been the case unless her system had been previously infected by it.

In conclusion, Dr. Sturgis related three cases of his own, in which the fathers were troubled with syphilitic lesions after marriage, when children were being born to them, yet the mothers remained healthy, and, as a consequence, not one of the offspring of any of them was syphilitic. In submitting his paper to the Society, he trusted that in the discussion upon it some light might be thrown upon this knotty question.

Prof. Otis, who was the first gentleman that spoke upon it, frankly acknowledged that it was indeed a knotty question, and one which it would be eminently desirable to have satisfactorily settled; but he said that he was inclined to take the same side of the question that Dr. Sturgis had done. He then expressed the opinion that there is a cessation of the power of inoculability in syphilis after three or four years at the most, and said that he believed with Mr. Hutchinson, that lesions appearing after that time are to be properly considered as sequelæ of syphilis and not the direct manifestations of the disease; just as nephritis is a frequent sequel of scarlatina. He then related a case of his own in point.

A gentleman of the highest social standing, who had been the subject of syphilis, married a lady of like position in life, contrary to the advice of Dr. Otis, but was afterwards in great dread lest he should communicate the disease to his wife. In due time a child was born to them; but neither mother nor infant ever showed any sign of syphilis about them,—much to the husband's relief. Several years passed by, when one day he was requested by the gentleman to see his wife, and he then found what looked precisely like a syphilitic mucous tubercle on one of her thighs. This he touched with nitrate of silver, and it gradually went away. It is true that it left a copper-colored mark, but, as there were no other symptoms whatever of syphilis, he thought it scarcely possible that it could have been of a specific nature. Not long afterwards, however, she was again brought to him by her husband, who said that he had noticed mucous patches in her mouth and fauces such as he himself had formerly had, and that now what he had so long feared for her had at length come to pass. Sure enough, there was no mistake now that she had well-marked syphilis; but Dr. Otis, remembering the long time that had elapsed since the husband had contracted the disease, and noticing that the lady was strangely indifferent to the matter, became convinced that she must have become infected in some other way, and finally succeeded in extracting from her that while off on a yachting-excursion she had had connection with a former lover of hers, who, it was ascertained, was suffering from acute syphilis at the time.

Dr. Otis thought it quite probable that the lesions spoken of in Dr. Sturgis's cases had been of the character of sequelæ of the disease, merely, and that this was the real reason why there had been no symptom of syphilis in the wives or children. Or, it was possible that in one or more of them, where the parts affected were the mouth and fauces, the lesions might be due to simple digestive derangements, or, more probably, the excessive use of tobacco, which not infrequently produce ulcerations of the mucous membrane almost exactly simulating those of syphilis. Yet that they are not of a specific nature is proved by the fact that they readily get well under very simple treatment.

Dr. L. D. Bulkley exhibited a well-marked

case of *dactylitis syphilitica*, whose history had some bearing on the points at issue. He had reported it in the *New York Medical Journal* in 1874, and said that he had now had it under observation for nearly three years altogether. The father had died at the beginning of the mother's pregnancy, but had given pretty clear indications of having had syphilis. The mother had never had any symptoms of the disease, so far as could be learned, but she had for some time suffered from epileptiform seizures, which became aggravated during the time she was pregnant with this child. Dr. Bulkley thought, however, that, as all the energies of the maternal system are directed towards the fœtus in utero, the syphilitic infection, too, had spent itself principally upon the child. She herself was put upon antisyphilitic treatment, and it is certainly true that the epileptiform attacks were greatly relieved by it, and that her intellectual perceptions also became clear at the same time; which seemed to indicate that her system had really been infected with syphilis, though *apparently* it was entirely free from it.

Drs. Quackenboss and Allyn also related interesting cases. The first was as follows. The wife of a gentleman who had had syphilis at the time of their marriage gave birth to a perfectly healthy child,—she herself also remaining free from the disease. The husband, who had been something of a *roué* previously, did not leave off his bad habits when he married, however, and when their child was about three years old the lady contracted syphilis from him, and obtained a divorce in consequence. After a time she married again, and the first child that she had afterwards was so profoundly syphilitic that it lived only ten days. This second husband was of a very different character from the first, and had never had syphilis.

Dr. Allyn's case was that of a gentleman, whose family he has attended for the last ten years, who came to him six weeks ago with an ugly-looking ulcer on the leg very much resembling a tertiary lesion. Finding that it obstinately resisted all the ordinary methods of treatment, he questioned the patient closely, and ascertained that he had formerly been under Dr. Van Buren's care for some affection of whose nature he was ignorant. From the latter Dr. Allyn then learned that he had contracted syphilis in 1859, and was under treatment until 1861, but that he had not been perfectly cured, on account of his inability to take iodide of potassium. Afterwards, however, all signs of the disease disappeared, and he married and had several healthy children. But during the last two years his wife has had three abortions, though she has never shown any recognizable indications of syphilis. Under the use of the bichloride of mercury the ulcer has rapidly healed. Dr. Otis remarked on this case that it was by no means probable that the abortions were caused by syphilis, and that it was altogether likely that the ulcer was simply a sequela of the disease, occurring at a period when, in his opinion, inoculation was impossible.

It will perhaps be remembered that when Mr. Clark Bell was about retiring from the presidency of the Medico-Legal Society he made an address in which he recommended the formation, under the auspices of the Society, of a Permanent Commission (consisting of distinguished men of both professions), to which all difficult or extraordinary questions of medical jurisprudence arising in the community might be referred for decision; after the plan of a similar Commission which has for some time been in successful operation in connection with the Medico-Legal Society of Paris. The New York Society has now taken action in the matter, and appointed the following gentlemen on the Commission: President, Dr. Frank Hamilton, *ex officio;* Dr. Ralph L. Parsons and Mr. J. F. Miller, to serve three years; Dr. Doremus and Mr. Clark Bell, to serve two years; and Dr. Hammond and Mr. Geo. H. Yeamen, to serve one year.

PERTINAX.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, FEBRUARY 24, 1876.

The VICE-PRESIDENT, DR. H. LENOX HODGE, in the chair.

Mastoid sequestrum. By Dr. CHARLES H. BURNETT.

THIS sequestrum, consisting of a large piece of the outer table of the mastoid portion of the temporal bone, was removed from Frank H., 16 months old, born in Philadelphia.

He was attacked by diphtheria in March, 1875, and was treated for that disease by Dr. Harlow, who finally sent him to me for treatment of his aural disease, six weeks after the onset of the diphtheria.

The mother of the child states that on the fourth day after the initial symptoms of diphtheria she noticed a red swelling behind the right auricle, over the mastoid. This swelling increased rapidly in size, but is said to have caused the child *no* pain, nor was it markedly tender on pressure. There is no history of any previous aural disease, nor of any diphtheritic deposit in or about the external ear.

By Dr. Harlow's advice, the mastoid abscess was poulticed, and in a few days it was opened by him, with a free discharge of pus. From that time until I saw the patient it seems that a constant and offensive discharge set in from the mastoid incision and from the ear.

I examined the case for the first time on the

22d of April, 1875, about six weeks after the onset of the diphtheritic disease, and found by the probe dead but adherent bone on the mastoid portion near the external auditory canal. The auditory passage was blocked by granulations. There was also considerable swelling about the ear, and the pus tended to burrow in the direction of the sterno-cleido-mastoid muscle. There was a sinus running from the mastoid abscess into the external auditory canal, which will, I think, account for the discharge from the ear and the granulations alluded to above, as well as lend probability to the statement of the mother that the mastoid disease preceded any kind of discharge from the external auditory canal. On the 27th of April, 1875, I made an incision, an inch long, over the mastoid portion, which gave free exit to the pus, and diminished the discharge from the ear, as well as the tendency on the part of the pus to burrow downward into the neck. Through this incision I could feel with my little finger the denuded bone.

In a month, on the 28th of May, there was a detached piece of bone at the opening I had made over the mastoid, and on June 1 I extracted the sequestrum here presented. The general swelling around the ear had gone down. The treatment up to this time had been simple cleansing of the ear and keeping the mastoid incision free enough for drainage and to permit the escape of dead bone.

The child was considerably run down by his blood-disease, but, with tonics and the good effects of a summer in the country, rapidly grew better. The ear was kept carefully cleansed, as was the opening of the sinus behind the auricle, and a weak solution of sulphate of copper (3 gr.–f ℥j) was used for instillation and injection.

By the 16th of February, this year, two hundred and ninety-five days after the free incision over the mastoid, the sinus behind the auricle finally closed; a slight discharge, a few drops, still came from the external ear every day or two.

So far as can be ascertained in so young a patient, now about 26 months old, there is no impairment of hearing left as the result of the mastoid disease.

In this child some of the chain of glands situated over the mastoid portion of the temporal bone and along the tract of the sterno-cleido-mastoid muscle have successively enlarged and sluggishly suppurated, without pain, which would seem to indicate that the inflammation over the mastoid portion, and of its outer table, in this case was due to an inflammation of such a gland, the first in the chain to be diseased by the diphtheritic poison. Such a disease as this, occurring *over the outer wall* of the mastoid portion *in a child*, becomes of moment not only to the hearing but even to the life of the patient. The latter is due to the fact that *in children* there is much greater probability of an extension inward of such a disease as I have just described than there is of its successful outward termination, for the dense tissues over the mastoid in young children are much more resistant than is the thin and somewhat fissured outer table of the mastoid portion of the temporal bone. Hence in just such a sluggish form of abscess over the mastoid as was found in this child there may be danger of a burrowing inward of the disease, deep inflammation of the mastoid cells, caries extending into the cranial cavity, pyæmia, and death.

It may be asked, Did this disease arise inside or outside of the mastoid portion of the temporal bone? It would seem from the latter, because the first aural symptom, if it may be called such, was the mastoid swelling, unaccompanied by pain in the ear. Had the disease started in the middle ear or in the mastoid cells, there would surely have been symptoms of great suffering in the child at the outset, and subsequently, it is highly probable, we should have found an impairment of hearing; whereas that function has not appeared to be affected at any time during the disease.

Foreign body removed from the upper wall of the external auditory canal. By Dr. CHAS. H. BURNETT.

This foreign body was removed from the upper wall of the right external auditory passage of a Scotchman, 35 years old.

The symptom complained of, and for which he sought relief, was an intense pounding noise in the ear, which caused him much annoyance, and brought on frequent headaches and attacks of dizziness. In the affected ear the watch was heard only in contact with the auricle. His aural symptoms, which had become especially annoying to him within several years, had led him to pick at his right ear, from which he had now and then brought small pieces of something which he stated had an offensive odor. He was entirely unsuspicious of the presence of a foreign object in his ear.

The examination of the ear revealed an apparently free auditory canal, but a very much thickened and irritated membrana tympani, and that part of the fundus of the auditory canal included in the membrana flaccida and the inner part of the upper wall of the canal seemed more hollowed out than usual. Upon inflating the tympanic cavity, the membrana moved outwardly, but no air escaped into the external ear, thus showing that there was no perforation in the drum-membrane. Since the general calibre of the auditory canal was free enough to examine thoroughly the entire membrana tympani, the foreign body was not detected immediately, as it was lying in a dome-like elevation of the roof of the canal.

In endeavoring to lift away what was supposed to be a flat scale of cerumen adherent

to the upper wall of the external auditory canal, I was surprised to remove a foreign body which looked like a grain of white corn, somewhat hollowed out from its small end inward. From this point the patient had probably picked away the small scales or pieces alluded to above. He knew nothing of the mode of its getting into his ear, as he had never placed any foreign body there himself, nor could he remember that any one else had placed anything there. He could not even suggest an explanation of its presence in the ear. The foreign body was at no point in contact with the membrana tympani when I examined the ear. At some previous time it might have been, which would help to account for the thickening of the membrane.

The entire roof of the external auditory canal was hollowed out by the long presence of this foreign body. Foreign bodies are often found hidden between the membrana tympani and the antero-inferior wall of the external canal, but I *have never found a foreign substance hidden in an elevation of the roof of the canal.*

Upon the removal of the foreign body from the ear the pounding noise ceased, and the disagreeable head-symptoms disappeared. The man reported himself at the infirmary several times afterwards, and I was satisfied the improvement in his case was permanent. The hearing was not markedly improved by the removal of the foreign substance. What the foreign body really is I cannot say; after its removal I placed it in water for twenty-four hours, and the small amount of cerumen attached to it melted off and stained the water: the outside white covering assumed the everted appearance you here see, and what may be called its contents are here floating about with this swollen but insoluble granular appearance. The hull is in glycerin and water; its contents in a solution of chloral hydrate (ʒj–ʒx).

I would esteem it a favor if the Committee on Pathological Research would throw light upon the true nature of this foreign substance.

The specimen was referred to the Committee on Morbid Growths, which reported, March 9, 1876:

"Your Committee find that the outer or capsular portion of the foreign body removed from the ear and presented by Dr. Charles H. Burnett is composed of numerous layers of tessellated epithelium, in which the nuclei are distinctly visible. The inner or central portion is made up of oval cells without nuclei, resembling those found in the parenchyma of various kinds of grain, and indeed of seeds generally. As no structural characteristics remain, however, it is manifestly impossible to designate the nature or origin of this offending substance."

THE death of Sir William Wilde, the aural surgeon, is announced.

ANNUAL MEETING OF THE STATE MEDICAL SOCIETY.

THE twenty-seventh annual session of the Medical Society of the State of Pennsylvania was held during Wednesday and Thursday, May 31 and June 1, in the First Reformed Church, Broad Street above Pine. Dr. Crawford Irwin, of Altoona, presided, and the session was opened with prayer by the Rev. David Winters. An address was then delivered by Dr. Drysdale, the Chairman of the Committee of Arrangements, in which, after extending a cordial welcome to the members of the Society, he alluded in just and well-chosen terms to the physicians who were eminent here in past years, who founded the schools, and many of whom took a prominent part in political matters at the time of the war of the Revolution. He referred to what he had seen of medical practice abroad, and, while in no way wishing to detract from the deserved fame of distinguished European authorities, thinks that in no country is practical medicine better taught than in our own, and that no physicians or surgeons can surpass ours in diagnostic skill and dexterity. The reports of the various counties were then received and referred to appropriate committees, and seats and an invitation to participate in the proceedings of the Convention offered to several visiting gentlemen. Dr. Ross, of Clarion County, then offered a preamble and resolutions, calling attention to the fact that in many counties of the State the fee of physicians for making autopsies is fixed at the totally inadequate sum of ten dollars, and suggesting that medical practitioners throughout the State should refuse to render such service for a less fee than thirty dollars. This gave rise to a lengthy debate, and the resolution was finally referred to a special committee. Dr. H. C. Wood urged the importance of addressing Congress upon the importance of granting an appropriation to enable Dr. Billings to publish the Subject-Catalogue of the National Medical Library. A committee, consisting of Drs. Wood, Dunglison, and Drysdale, was appointed, with power to act. In the evening, the President delivered his address, congratulating the Society on the good work already accomplished, and calling their attention to the bright out-look which the future presents. The Convention reassembled on Thursday morning, and Dr. R. Davis delivered the address upon Obstetrics, choosing for his theme Placenta Prævia, which he handled in a thorough and masterly way. This was followed by the address on Surgery, by Prof. D. Hayes Agnew, who gave a concise statement of whatever of importance has attracted professional thought in Surgery within the past twelve months.

The most interesting part of the address was, perhaps, that in which the antiseptic treatment, which has of late years produced such a complete revolution in the practice of

many hospitals, was discussed. The details of this mode of operating were given, and their importance insisted upon, together with the statistical reports of some of the largest European hospitals in which the method has been thoroughly proved.

Resolutions approving the action of the surgeons and physicians of the Harrisburg Hospital who, in 1873, resigned their positions on account of the introduction of homœopathic practice into the hospital, were adopted.

The death of Dr. Edward Wallace, of West Philadelphia, which occurred within the past year, was announced, and resolutions eulogistic of him were adopted.

Reports were next received from the different counties relative to the purity of the water-supplies, and to the position of wells in regard to cemeteries and cesspools, and the influence of impurities in causing typhoid fever. The introduction of this fatal disease both in England and America by milk was then discussed, and the use of condensed milk prepared in districts remote from cities was considered the safest solution of the problem.

The orators for the next meeting were appointed, and the present standing committee continued. The committee on nominations then reported for the ensuing year: President, Dr. R. B. Mowry; Vice-Presidents, Drs. G. W. Reily, Amos Seip, Thomas Lyon, and D. P. Miller; Corresponding Secretary, Dr. Thomas Drysdale; Permanent Secretary, Dr. W. B. Atkinson; Recording Secretary, Dr. H. L. Orth; Treasurer, Dr. Benjamin Lee. With the usual formalities Dr. Irwin resigned the chair to the new President, who in a neat little speech thanked his fellow-laborers for the honor they had done him; and, the deliberations being finished, the Society adjourned, to meet on the 2d of June, 1877, at Harrisburg.

On the evening of Wednesday, several medical gentlemen of the city tendered the hospitalities of their houses to the members of the convention, and on Thursday a reception was given them at the Academy of Fine Arts.

REVIEWS AND BOOK NOTICES.

OUTBREAK OF CHOLERA AMONG CONVICTS. By MAX VON PETTENKOFER, M.D. With eight lithographic plates. Imperial quarto. Pp. 106. Philadelphia, J. B. Lippincott & Co.

In December, 1873, an outbreak of cholera occurred in the Royal Bavarian prison at Laufen, on the Salzach, which, as regards the number and virulence of the cases, has hardly its equal in the history of cholera in Europe. Among the 500 convicts confined in this prison, there were, between November 29 and December 9, 128 cases of true cholera, of which 82 proved fatal. In addition, 179 cases of diarrhœa occurred nearly simultaneously. The opportunity here presented of studying the course of cholera in a community living in precisely the same circumstances and in every respect under the most rigid inspection and control, was unusually favorable, and Professor Von Pettenkofer, well known in connection with the etiology of the disease, was directed by the Cholera Commission for the German Empire to draw up a report of the outbreak. The result of his investigations is contained in the volume before us, which includes carefully tabulated statements, showing the course of the epidemic, its introduction into the prison, and the influence of age, imprisonment, the bodily state of the convict, influence of previous disease, nursing, and treatment, on the occurrence and course of the disease. In addition, the dissemination of cholera throughout the town, the influence of privies, disinfectants, etc., etc., are all examined with a care and minuteness which render this report a valuable addition to our knowledge of the etiology of cholera epidemics.

BOTANICAL HAND-BOOK. Compiled and published by CHARLES E. HOBBS. Boston, 1876.

Whatever the value of this book may be to druggists, to physicians we are sure it will not prove overwhelmingly attractive. Nevertheless, its author appears to have done well that which he has attempted to do,—for which praise should be awarded. The work is formed of three parts. The first of these is composed of three columns of names, the first or dominant column being formed out of the common drugs arranged alphabetically; the second gives their English, and the third their botanical names. In the second part the botanical names occupy the first place; the second column contains the common names, and the third column gives a very brief formulary of properties. The third part gives the pharmaceutical names, as found in the United States, British, and German Pharmacopœias, referring to the common and botanical names.

GLEANINGS FROM EXCHANGES.

ORCHITIS (*The Lancet*, February 19, 1876).—Mr. John Gay, after a review of the recent discussion as to the treatment of orchitis, epitomizes as follows the detail of the treatment which he prefers, and which, he says, succeeded admirably in a hundred recorded cases:

Rest on the back, with cold applications; a good purge with five grains of calomel, repeated once and again if necessary, and a drachm of tincture of henbane three times a day, until the patient was brought obviously under its influence,—a larger dose if necessary; opening a vein or two in the scrotum, provided the abdominal ring compressed the

cord so as to occasion scrotal congestion. On the subsidence of the pain, quinine or steel, or both combined, and an injection of sulphate of zinc or acetate of lead, in solution, into the urethra. The use of a small trocar or grooved needle as soon as fluid is felt in the tunica vaginalis.

As an injection he uses a dilution of the solution of pernitrate of mercury; but it must be used very cautiously, beginning with two or four minims to eight ounces of water, and gradually increasing it until it is sufficiently strong to give a little uneasiness or pain.

Rest in these cases is very effective; but the treatment described in addition will prove to be an exceedingly valuable adjunct, and all that is needed for the greater number of cases of gonorrhœal orchitis.

INOCULATION OF FEVERS.—The recent occurrence of repeated epidemics of typhoid, typhus, and relapsing fevers led Motschutkoffsky (*Centralblatt für die Medicinischen Wissenschaften*, 1875, xi. 193) to experiment concerning the possibility of inoculating these diseases.

The experiments were made on men (volunteers), apes, rabbits, dogs, and cats, the material introduced being the blood, milk, sweat, urine, saliva, and excrement of the diseased patient.

The repeated attempts at inoculating typhus and typhoid fevers were unsuccessful. Men were readily inoculated with relapsing fever, the blood only of the material employed transferring the disease; the experiments on the lower animals produced negative results merely.

Some time before these experiments were made, Dr. Münch had successfully inoculated himself with relapsing fever.

In order that positive results may arise, the blood must be taken from the patient during the febrile attack, it being of no consequence whether the spiral fibres were seen or not. Experiments proved the inefficiency of the blood removed during the period of incubation, which lasted from five to eight days, or during the remission. The inoculation of a third person with the blood from a person who had received the disease through inoculation was successful. There was no evidence of an increased potency in the material inoculated, as stated by Davaine with reference to pus. A successful result followed the inoculation of infected blood diluted with equal parts of a quinine solution; the motion of the spiral fibres was stopped in consequence of the admixture. When the blood was diluted with alcohol these fibres ceased to move, and the inoculation of this mixture was unsuccessful.—*Boston Med. and Surg. Jour.*

DIAGNOSIS OF ABDOMINAL TUMORS (*New York Medical Journal*, March, 1876).—In a recent clinical lecture, Prof. A. D. Jovini gave his pupils some common-sense directions for avoiding gross errors in cases of abdominal tumors. After directing them to aim at a diagnosis by exclusion, he proceeded:—First, exclude pregnancy, uterine and extra-uterine; then consider whether or not there may be an immense deposit of fat on the abdominal walls. You do this by lifting up the skin between your hands. Next think of tympanites. When you have gone thus far, decide by palpation whether the tumor is fluid or solid. If it is solid, it is in all probability either a fibroid of the uterus, an enlarged liver, or an enlarged spleen. If it is fluid, it is either ascites, an ovarian cyst or fibro-cystic tumor of the uterus, a distended bladder, hydatids of some of the viscera, pyonephrosis, or abscess. The most common forms of abscess are abscess in the neighborhood of the ileo-cæcal valve, abscess the result of pelvic cellulitis, and abscess from disease of the pelvic bones.

When you reach the point of diagnosis of a fluid-tumor, you are then justified in aspirating the case and examining the obtained fluid by the microscope.

CANCEROUS DISEASE OF THE BLADDER RESEMBLING CALCULUS (*New York Medical Journal*, March, 1876).—Dr. Post reports the case of a man, aged 50, upon whom the diagnosis of stone had been made.

When the patient was examined with a steel sound, a sensation of roughness was communicated to the instrument, but no click could be discovered. A lithotrite was then introduced, and a small calcareous fragment removed. It was then decided to introduce the hand into the rectum, and, although it was carried up as far as the wrist, no satisfactory aid to the diagnosis was obtained. Under the supposition that the case was one of encysted calculus, cystotomy was performed by means of the bilateral operation, but the mass could not be secured by the forceps. The finger could not be introduced to make an examination, from the depth of the perineum. For a week after the operation the patient did well, and was very much relieved, but eventually sank and died.

At the autopsy it was found that there was malignant disease of the bladder. The surface of the cancerous mass was covered over with calcareous matter, and in this way the difficulty of making a diagnosis was accounted for.

SUCCESSFUL SUPRA-PUBIC LITHOTOMY (*The American Practitioner*, March, 1876).—Dr. Guido Bell reports the case of a boy, æt. 3½, who, six months previously, had had a vesical calculus the size of a pea removed from his bladder, and who had again symptoms of stone. Dr. Bell therefore performed supra-pubic lithotomy, the patient being completely under the influence of chloroform. The stone, which was the size of a large bean, and having abundant crystals on its surface, was removed with the index-finger; the incision in the bladder was closed by a single silk suture, silk sutures were used for the abdominal in-

cision, and an ointment, containing carbolic acid and morphine, applied externally to the wound.

In two hours some bloody urine was passed by the urethra, and the patient slept moderately well the first night succeeding the operation. On the twenty-fifth, considerable fever and nervousness; on the twenty-sixth, the superficial sutures were removed, and the wound emitted a decidedly gangrenous odor; and on the twenty-ninth, urine escaped freely through the now opened wound.

On November 1, the gaping edges of the wound were brought together with adhesive plaster, and soon after the urine resumed its natural channel. At the end of the month a small fistula existed, but it healed spontaneously.

MISCARRIAGES IN A SUBJECT OF SYPHILIS (*Boston Medical and Surgical Journal*, March 16, 1876).—At a recent meeting of the Obstetrical Society of Boston, Dr. Forster read the following case: Mrs. L., 31 years of age, American, was married at twenty; she had always enjoyed good health, with the exception of dysmenorrhœa. Soon after marriage she became pregnant, and when three months in that condition had an abortion performed; since then she has miscarried eleven times. Her pregnancies have terminated as follows:

Second, at the seventh month, the premature labor being attributed to a blow upon the abdomen; third, at the seventh month, without any assigned cause; fourth, at the fifth month, after an attack of vomiting; fifth, at the seventh month, cause unknown; sixth, at the third month, being, as the patient says, "a false conception," and following a fall with a wash-tub; seventh, at the sixth month, after lifting a heavy overcoat; eighth, at the fifth month, cause unknown; ninth, at the seventh month, after a chill; tenth, at about the fourth month, membranes unruptured; eleventh and twelfth, at the sixth month. With her fourth pregnancy chloasma of the forehead appeared, and still remains. After her sixth pregnancy she was treated for metritis, and afterwards for a displacement, for which she wore a pessary for about two weeks; she has otherwise made good recoveries. She has had no symptoms of syphilis other than these repeated miscarriages. Her husband acknowledges to have been treated for a venereal sore three years before his marriage, but has never had any secondary symptoms. After the eleventh, both husband and wife were placed upon an anti-syphilitic treatment, but it was probably not followed longer than a few weeks. Both parties are anxious for a living child, and are at present under treatment.

REMOVAL OF A LYMPHOMA (*The Canada Medical Record*, March, 1876).—Dr. William E. Bessey describes as follows a tumor which he enucleated, and which proved to be a lymphoma or a lymphadenoma:

It occupied the superior portion of the right posterior triangular space, and projected into the superior carotid triangle lying upon the sterno-mastoid, and covering the chain of lymphatic glands which run along the posterior border of this muscle (it proving to be made up of three of these glands hypertrophied), and was covered in by the fibres of the platysma myoides spread out to an aponeurosis. Its long axis was in a line with the fibres of the sterno-mastoid, and was crossed above by the posterior auricular and a superficial cervical branch. The external jugular vein lay in immediate contact with it underneath, being in a sort of niche on its under surface, its fundus dipping down well into the superior carotid triangle. Its length was about six inches, its breadth about four inches, and it was very movable, by which means its relative position could be somewhat improved.

The operation was entirely successful, recovery being rapid and complete.

SO-CALLED "ULCERATION OF THE OS UTERI" (Ibid.).—Dr. Clifton E. Wing asserts that what is commonly considered and treated as ulceration of the womb is not ulceration at all, but one of two conditions, both of which, once clearly understood, are simple enough. In the first condition, frequently found in its typical form in women who have not borne children, and where the cervix and os retain the normal shape, there is seen a red abrasion often entirely encircling the os; it is occasioned by the irritating discharge poured out by a uterus affected with catarrh, or, as is commonly said, endometritis. We all know how often comes a so-called cold in the head, with its accompanying discharge from the nose; the uterine mucous membrane is liable to a similar catarrhal discharge. The woman affected with a discharge from the nose removes it by the use of the handkerchief, and so prevents it from excoriating the upper lip and the edge of the nostril; if the discharge is still sufficiently irritating or excessive to cause some excoriation, perhaps the use of the handkerchief is supplemented by an application of cold cream or other unguent to the part. Now let the same woman, from, it may be, the same cause, have a uterine catarrh. She cannot keep the irritating discharge constantly removed from the surface of the cervix uteri, nor can she practically apply any unguent; and the end of the cervix in that woman is soon in the same condition as the upper lip and nostril of the little ragged boy who runs about the street on a wintry day, having no handkerchief to use and no cold cream to apply: namely, the epithelium is removed, and a raw, excoriated surface comes to view.

Catarrh of the uterus has generally become chronic before the patient applies to the physician, and the papillæ at the abraded spot, as a result of long-continued irritation, fre-

quently have become much hypertrophied, and deceive the inexperienced eye into diagnosticating granulations. Too often, additional irritation is caused by the physician, who, totally misunderstanding the case, hastens to cure the "ulcer" by lunar caustic or his other "favorite application." What educated physician would think of attacking the excoriated nostril and upper lip referred to by "burning out the 'ulcer,'" giving no attention to the catarrh, its cause? Why should we do the same thing in exactly the same condition in another part of the body? If the discharge be stopped by proper applications to the inner surface of the uterine cavity, the so-called "ulceration" will take care of itself; for you may depend upon it that if you are not more skilful than most physicians in making your application, enough will be spilled upon the excoriation outside to stimulate that part sufficiently.

The other condition mistaken for ulceration is rupture with eversion. It is important that this should be understood correctly, as many able physicians, and specialists even, have failed entirely to recognize the real trouble or its proper treatment, and it explains those cases which have been described as "severe ulcerations which require active treatment," wherever the strongest acid and caustic, the actual cautery, and even amputation of the cervix, have been tried, or even decided attempts to bring about a return to a normal state.

MISCELLANY.

DURING the present week the Faculty of the Department of Medicine and Surgery of the University of Michigan have received official communications from Bellevue Hospital Medical College, New York City, the College of Physicians and Surgeons, New York City, and the Long Island College Hospital, Brooklyn, New York, stating that they will continue to accept their tickets and recognize their graduates as heretofore.

COOKING BY COLD.—It is a curious fact that the action of intense cold on organic substances is similar to that of a high degree of heat, and that meat can be cooked by cold. Quite recently a Hungarian chemist, Dr. von Sawiczewsky, has preserved meat by subjecting it, in a perfectly fresh state, to a temperature of 33° below zero, F., and sealing it afterwards in tins. The results obtained have been highly satisfactory; the meat on being removed from the cans appears, in point of smell and color, as fresh as if just taken from the butcher's stall. A commission appointed by the German governments has lately conducted a series of careful and successful experiments upon the process; and, as a final test, two corvettes of the German navy, being about to circumnavigate the globe, have been supplied with a large stock. An extensive factory is being erected in Hungary for its manufacture.—*Scientific American.*

DR. BRUCK, JR., is stated to have invented a method of illuminating the oral cavity so intensely that even the roots of the teeth in the jaw-bone can be recognized.—*Med. Examiner, April* 20, 1876.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM MAY 21, 1876, *TO JUNE* 3, 1876, *INCLUSIVE.*

MCCORMICK, CHAS., SURGEON.—To report in person to the Surgeon General of the Army. S. O. 99, A. G. O., May 19, 1876.

SMITH, J. R., SURGEON.—To represent the Army Medical Department at the annual meeting of the American Medical Association at Philadelphia, on June 5. S. O. 103, A. G. O., May 26, 1876.

BAILY, J. C., SURGEON.—Assigned to duty as Post-Surgeon at Newport Barracks, Ky. S. O. 73, Department of the South, May 29, 1876.

WOODWARD, J. J., ASSISTANT-SURGEON.—To represent the Army Medical Department at the annual meeting of the American Medical Association at Philadelphia, on June 5. S. O. 103, A. G. O., May 26, 1876.

BILLINGS, J. S., ASSISTANT-SURGEON.—To represent the Army Medical Department at the annual meeting of the American Medical Association at Philadelphia, on June 5. S. O. 103, A. G. O., May 26, 1876.

WILLIAMS, J. W., ASSISTANT-SURGEON.—In addition to his duties as Chief Medical Officer, to take charge of the battery of Captain Baker's company, Sixth Infantry, S. F. O., Headquarters Department of Dakota (in the field), May 14, 1876.

HUBBARD, V. B., ASSISTANT-SURGEON.—To accompany battalions of Fourth Artillery to and from Sitka, Alaska; and, upon completion of this duty, rejoin his station, Alcatraz Island, Cal. S. O. 66, Division of the Pacific, May 23, 1876.

BROOKE, JNO., ASSISTANT-SURGEON.—Assigned to duty at Columbia, S. C. S. O. 73, c. s., Department of the South.

KINSMAN, J. H., ASSISTANT-SURGEON.—Granted leave of absence for one month. S. O. 70, Department of Dakota, May 24, 1876.

CALDWELL, D. G., ASSISTANT-SURGEON.—Granted leave of absence for one month, with permission to apply for an extension of one month. S. O. 90, Department of Texas, May 19, 1876.

TAYLOR, M. K, ASSISTANT-SURGEON.—In addition to his duties as Post-Surgeon, to perform those of Attending-Surgeon at these Headquarters. S. O. 93, Department of Texas, May 24, 1876.

WHITE, R. H., ASSISTANT-SURGEON.—Assigned to duty as Post-Surgeon at Ringgold Barracks, Texas. S. O. 93, c. s., Department of Texas.

FITZGERALD, J. A., ASSISTANT-SURGEON.—Assigned to duty as Post-Surgeon at Fort Lapwai, Idaho T. S. O. 54, Department of the Columbia, May 8, 1876.

ELBREY, F. W., ASSISTANT-SURGEON.—Assigned to duty as Post-Surgeon at McPherson Barracks, Atlanta, Ga. S. O. 73, c. s., Department of the South.

BYRNE, C. B., ASSISTANT-SURGEON.—When relieved by Assistant-Surgeon Meacham, to report immediately in person at these Headquarters for assignment to duty. S. O. 90, c. s., Department of Texas.

JACKSON, D., ASSISTANT-SURGEON.—Granted leave of absence for four months, with permission to go beyond sea. S. O. 103, A. G. O., May 26, 1876.

FINLEY, J. A., ASSISTANT-SURGEON.—Leave of absence extended for one month. S. O. 51, Military Division of the Missouri, May 31, 1876.

REED, W., ASSISTANT-SURGEON.—Assigned to duty at Camp Lowell, Arizona T. S. O. 59, Department of Arizona, May 9, 1876.

COMEGYS, E. T., ASSISTANT-SURGEON.—Assigned to duty as Post-Surgeon at Fort Duncan, Texas. S. O. 86, Department of Texas, May 13, 1876.

SPENCER, W. G., ASSISTANT-SURGEON.—Assigned to duty at Raleigh, N. C. S. O. 73, s. c., Department of the South.